

**METHODS AND DEVICES FOR PERFORMING ARRAY BASED ASSAYS**

**ABSTRACT OF THE DISCLOSURE**

**[00150]**        Devices and methods for performing an array assay are provided.

Embodiments of the subject array assay devices include (1) a base, (2) a cover, and (3) a clamping member for holding the cover to the base, wherein when the cover is operatively held to the base about a structure that includes an array assembly spaced-apart from a backing element, the array assembly and the backing element are deflected to substantially the same curvature. Embodiments of the subject methods include contacting a sample with a backing element and placing the backing element supported sample in contact with an array assembly to form a structure that includes the backing element and array assembly. The structure is then held together using a subject array assay device and the array substrate and the backing element are deflected to substantially the same curvature.